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FACT SHEET

FOR PART-TIME
FARMERS AND
GARDENERSUNITED STATES
DEPARTMENT
OF AGRICULTURE

KEEPING LAYERS FOR THE FAMILY EGG SUPPLY

Many farm families are finding it profitable to keep a few chickens to produce fresh eggs for home use. Properly managed, a small flock requires little labor and assures the family of having a liberal supply of eggs most of the year.

In many areas small farm flocks have disappeared, and the larger commercial sized broods have not replaced them. All this means that many small towns and rural communities are without a supply of locally produced eggs. The eggs that rural families do get are not always of the quality they desire, nor are they available during certain seasons of the year.

GETTING STARTED

A family of four will need 16 to 20 layers to keep it supplied with eggs. It will take about four or five hens to furnish one person with two eggs per day. Of course, there will be times when the flock will produce more.

One way to start your flock is to buy day-old chicks. A small group of 50 chicks or less can be brooded under a single heat lamp. Some folks will want to buy straight-run chicks (about one half will be of each sex) and grow the cockerels for meat. Others may prefer to buy pullet chicks. It is usually best to start the brood in the spring after the weather begins to warm.

Another possibility is to buy started pullets. They are usually sold at 20-22 weeks of age, and are ready to lay. Ask your hatcheryman for sources of started pullets.

A person may also be able to buy a few layers from a local poultryman. Such pullets may have been laying for a short time or they may be older birds that are still in good laying condition. Starting with mature birds has the advantage of eliminating the time and work involved in brooding and rearing.

If eggs are your primary interest, choose a breed or strain of birds that is bred for high egg production. The White Leghorn type of hybrid or strain cross is preferred. For those interested in meat quality as well as egg production, the choice may be certain crossbreeds, Rhode Island Reds, or other heavy breeds.

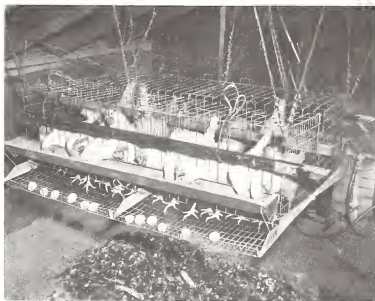


Figure 1 - A small colony cage

The colony cage shown above was converted from used single bird cages. New or used cages can be purchased and hung in existing farm buildings. A small flock of 16 to 24 birds will supply the farm family with an abundant supply of fresh eggs daily.

HOUSING

Providing adequate housing for a small flock is not a problem on most farms. Facilities which could easily be remodeled and used are probably already available. Confinement of the flock is recommended for the following reasons:

1. To simplify care for flock.
2. To keep birds from gardens and yard.
3. To prevent eggs from being laid in odd nesting areas about the farm.
4. To prevent losses from predators.

Cages. The small colony cage, such as that shown in figure 1, makes an excellent shelter for a small flock. Place it in any of the outbuildings around the farmstead where it will fit most appropriately. Let droppings accumulate on the floor or provide a tray for them under the cage. Equip the cage with a feeder and waterer.

If you want to construct your own colony cage see figure 2 and the accompanying building suggestions. Building a colony cage makes an ideal project for a youngster.

If given proper care and attention, hens do well in cages. Records on 13 White Leghorn hens housed in a colony cage showed that in 27 weeks they produced 135 dozen eggs. This averages 8.5 eggs per day, or about 65 percent of production. The cage was located in a non-insulated pen on the University of Missouri poultry farm. The laying period was from late October 1964 through April 1965.

Since confined birds cannot scavenge for themselves, they naturally require a complete ration and regular attention. Caged birds should be properly debarked to prevent cannibalism.

Provide from 0.5 to 1 sq. ft. of floor space in the cage per light breed bird. Heavy breeds will need from 1 to 1.5 sq. ft. per layer.

If the building you select for your colony cage is drafty, line the walls with plastic during the winter months. Use lat strips to fasten plastic securely.

Flies sometimes become a problem with poultry flocks. To combat this problem, use only those insecticides recommended for use in and around poultry houses.

For more detailed information on management see the reference list on page 4. Listed publications are available from the U.S. Department of Agriculture.

Floor. Many farms still have a (10- by 12- inch) brooder house which can be used to house the home flock. Such a house will take care of 40 to 60 confined layers very nicely. If a building of similar size is not available, a person can partition off a part of another building.

The brooder house should be well lighted and comfortable for the flock. It should have plenty of fresh air, but not drafts. The ceiling of the house or pen may be insulated to make it cooler in the summer and warmer in the winter.

The equipment needed includes:

1. Nests—one individual nest for each four to five hens.
2. Feeder—one hen-size hanging type feeder is adequate for 25 to 30 birds.
3. Waterer—preferably automatic. Many types are available.
4. Lights—one 60-watt bulb for each 200 sq. ft. of floor space. Use lights to provide a 14-hour day from September through early March. The purpose of lights is to stimulate egg production.
5. Roosts are not necessary. If you wish to provide them, space the roosts about 12 inches apart.

FEEDING

Twenty-five light breed hens in good production will eat 6 to 7 pounds of feed per day. This feed may be supplied as a complete 16 percent protein all mash or as a 20 percent protein mash plus whole grain. The latter system is most practical on farms where a good supply of homegrown grains is hand-fed in late afternoon in the ratio of 60 parts mash to 40 parts of grain.

Provide a small hopper divided into two sections. Keep one end filled with granite grit; the other end may be filled with oyster shell or hen-size limestone grit. For birds in cages, sprinkle a handful of grit and oyster shell across the feed about once a week.

Waste products from the kitchen may be used to supplement a hen's regular diet. Once a day feed only what the flock will eat in 5 to 10 minutes. Be careful not to overfeed, and remember that some kitchen scraps, such as onions and fruit peelings, can cause off-flavor in eggs.

FLOCK HEALTH

Keeping your flock in a comfortable, well-ventilated house is essential to having a healthy flock. Check birds regularly for lice or mites.

Remove extreme culls in the flock as soon as they are noticed. A cull bird is not difficult to spot in a small flock. Do not waste feed on a bird that is out of condition and not likely to develop into a profitable layer.

All dead birds should be disposed of by burying deep in the ground or burning in an incinerator.

CARE OF EGGS

Try to produce as many clean eggs as possible. Wash dirty eggs in water that is warmer than the eggs. An egg-cleaning detergent-sanitizer can be used in the wash water to make the job of cleaning easier. Dry eggs before storing.

Store eggs in the refrigerator to keep them fresh. If you have more eggs than you can use, it is best to dispose of them weekly, thereby guaranteeing your family top-quality eggs.

Use a candling light to detect blood spots and cracked eggs. You can buy a candling light or build your own. A suitable light can be made by cutting a 1 1/4-inch diameter hole in the end of a coffee can. Insert a light bulb fixture through the lid. Use a 40-watt bulb.

View the interior of the egg by holding the large end up to the hole cut in the bottom of the can. As the light passes through the egg, twirl the egg several times. If blood spots are present, you will be able to detect them.

For more details on grading and candling techniques, see "Egg Grading Manual," Agriculture Handbook No. 75, U. S. Department of Agriculture.

FREEZING EGGS

To freeze the white and yolk of eggs together, break the eggs and thoroughly mix the yolk and white.

Use an electric mixer at low speed to avoid incorporating any more air than is necessary. No further treatment is needed. Pour the whole egg mixture into convenient-size containers and freeze.

If you plan to freeze whites and yolks separately, separate the eggs in the usual way. Be careful to avoid getting any yolk into the whites; they will not whip if mixed with yolk. Mix the whites to a smooth foam-free consistency.

Freeze in a suitable container. The frozen, separated yolks will gel unless salt or sugar is added when they are mixed. Add 1 teaspoon of salt or 2 tablespoons of sugar, corn syrup, or honey to each cup of yolks. Remember to allow for the salt and sugar in the added ingredients when using frozen yolks in recipes.

Suggestions For Building A Colony Cage

Read completely before starting.

1. Construct frame as shown in figure 2 using 2-by 4-inch lumber. Slope floor supports A and B to allow eggs to "roll away" after being laid.
2. The wire for the floor is cut as shown in figure 3.
3. Stretch 1-by 2-inch welded wire tightly across A and B. The wire floor will have to hold 75 to 100 pounds or more, so it must be secured tightly to prevent sagging. This can be done by fastening the wire securely with a staple at each strand on one side. Use hammer claws or an iron rake on the opposite end to create tension;

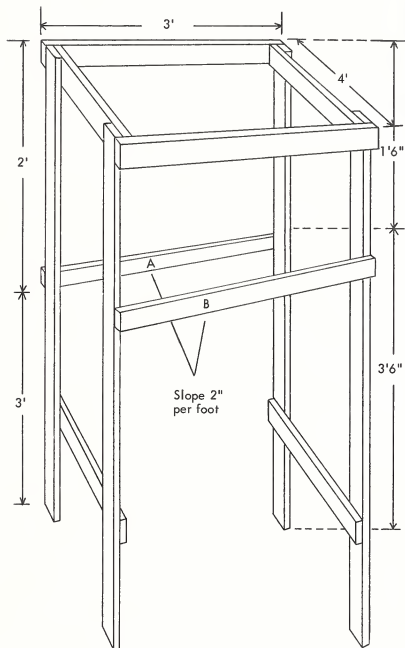


Figure 2 - Framing

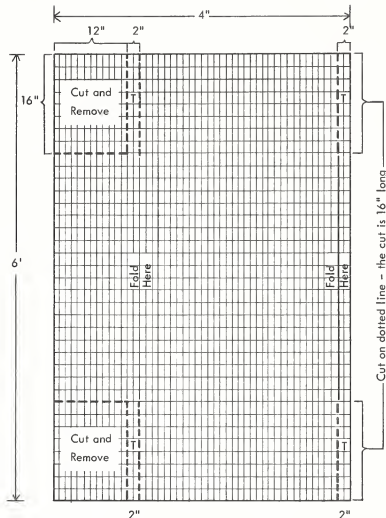


Figure 3 - Cutting the floor

Take a piece of 1" x 2" welded wire 4' x 6' long. Cut as shown on dotted lines. Then fold wire upward at 90° angles lengthwise along the line of the inner cuts as indicated. Slide wire into position on A and B (see fig. 2) leaving an overlap of about 1 foot on each end. You are now ready to secure the floor in place. Fasten tabs (T) to corner posts and fashion egg collection tray.

- then fasten with staples, starting in the center and working toward the back and front of the cage. Tabs (T) in fig. 3) are folded up and stapled to corner posts to help support floor.
4. The wire on sides and top is 2-by 4-inch welded wire. Cut pieces for side and top and fasten them to the frame securely with staples. Place wire on the sides of the frame with the 2-inch spacing running horizontally.
5. Cut a 10-by 12-inch opening in one side and use the cutout for a door. Fashion hinge and hook out of wire.
6. Leave a 2 1/2-inch space between the bottom of the floor in the front and the bottom edge of the front wire so that the eggs will roll out into the collection tray. See figure 4.
7. Waterers and feeders can be made of rain guttering (see figure 4) and attached to the front of the cage or any convenient spot. Be sure the birds have easy access to the feed and water. It may be necessary to cut the wire above the troughs to provide vertical slots 2 inches wide and 6 to 8 inches long.

The feeder and waterer should run the length of the cage to provide adequate space. Additional feed and water space can be provided on an opposite side of the cage.

References

United States Department of Agriculture publications:

1. "The Home Chicken Flock," Leaflet 497.
2. "Brooding Chicks With Infrared Lamps," Leaflet 397.
3. "Culling Hens: A Way to Increase Egg Profits," Leaflet 465.
4. "Lights For More Winter Eggs," Leaflet 377.
5. "Frostproofing Water System in Poultry Houses," Leaflet 434.
6. "Egg Grading Manual," Agriculture Handbook No. 75.
7. "Farm poultry Management," Farmers Bulletin No. 2197.

To obtain single copies of USDA publications, write to the Office of Communication, U.S. Department of Agriculture, Washington, D.C. 20250.

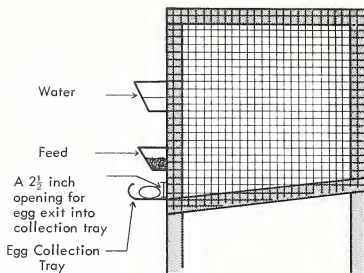


Figure 4 - Side View